

EVALUATION OF SURFACE IRRIGATION SYSTEMS

Cooperator: _____ Field No.: _____ Acreage: _____ Date: _____
Soil Type: _____ I.R.: _____ Source of Supply: _____
Available Stream: _____ Irrigation Slope: _____ Side Slope: _____

EVALUATION OF IRRIGATION	Existing	RECOMMENDATIONS
1. Crop		
2. Method of Irrigation		
3. Length of Run L		
4. Border Width of Furrow Spacing W		
5. No. of Furrows or Borders per set		
6. Area of Set—Acres $\frac{L \times W}{43560} = A$		
7. Irrigation Stream, Border cfs Q		
8. Stream Size per Furrow in gpm		
9. Unit Stream Size, Borders in cfs q		
10. Application Time in Hours T		
11. Time to Reach End of Run		
12. Water Application in In. per Ac. D		
13. Waste Water Stream Size, cfs Q1		
14. Time in Hours D1		
15. Waste Water in Inches D2		
16. Net Application in In. per Ac.		
17. Application Needed, inches		
18. Efficiency % Line 17/12		
19. Border Height in Inches		
20. Water Depth in Inches		
21. Furrows Initial Stream Size gpm		
22. Furrows Final Stream Size gpm		
23. Irrigation Interval		
24. Disappearance Time		

$$Q = \frac{qWL}{100} \quad q = \frac{100 Q}{WS} \quad L = \frac{100 Q}{qW} \quad W = \frac{100 Q}{qL}$$

$$Q = \frac{DA}{T} \quad A = \frac{QT}{D} \quad D = \frac{QT}{A} \quad T = \frac{DA}{Q}$$

Prepared by: _____

Date: _____